

NIH-DC Initiative to Reduce Infant Mortality in Minority Populations in the District of Columbia.

Purpose

The purpose of the Cooperative Community-based Perinatal Studies and Interventions in Minority Populations (otherwise known as the NIH-DC Initiative to Reduce Infant Mortality in Minority Populations in the District of Columbia) was to develop coordinated projects designed to better understand the reasons for the high rate of infant mortality in the District of Columbia (DC) and to design and evaluate intervention projects aimed at reducing the number of infants in DC who are at increased risk of dying in their first year of life.

The program was sponsored by the NIH Office of Research on Minority Health (ORMH) through the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD). Populations studied included inner-city pregnant or postpartum women and/or their children who were recruited through primary care facilities, public health clinics, or inpatient settings; students in Washington, DC middle schools; and infants up to age 36 months who were treated in hospital emergency rooms or admitted to hospitals with injuries.

About the NIH-DC Initiative (1992–2010)

The NIH-DC Initiative began in 1992 as a congressionally-mandated research project to reduce infant mortality in Washington, DC through community-based studies and interventions. A total of six multisite observational studies were conducted that focused on prenatal care, immunization, child injuries, fetal alcohol effects, and characteristics of neonatal intensive care units. Nine randomized controlled trials were implemented to evaluate interventions on parenting skills, adolescent pregnancy, interpregnancy spacing, smoking, depression, domestic violence, lead exposure, and nicotine replacement therapy. Over 10,000 subjects were studied, including, pregnant women, postpartum women, teenage students, teenage mothers, elementary and middle school students, children under 3 years of age, and newborns.

The project was comprised of three Phases (Phase I: 1993–1998; Phase II: 1998–2004; Phase III: 2004–2010). Each phase produced individual studies that addressed factors that contribute to infant mortality:

- Inadequate prenatal care (initiating prenatal care late in pregnancy and receiving inadequate numbers of prenatal care visits) and inadequate access to health care;
- Disruptive family lives, intimate partner violence, and lack of parenting skills;
- Unintended and adolescent childbearing;
- Maternal morbidity and obstetric complications;
- Other risk factors such as smoking, secondhand smoke exposure, depression, domestic violence, poor reproductive health, alcohol and illicit drug use, etc.

Collaborating institutions included:

- Children's National Medical Center
- George Washington University Medical Center
- Georgetown University Medical Center
- Howard University Hospital
- *Eunice Kennedy Shriver* National Institute of Child Health and Human Development
- National Center on Minority Health and Health Disparities
- RTI International, the Data Coordinating Center (DCC)

The DCC facilitated the design of protocols; assisted in the development of data collection instruments; developed data collection procedures and data management activities; processed the data; planned and conducted statistical analyses; and collaborated with the investigators on developing conference presentations and manuscripts. Although the collaborating sites were responsible for hiring field personnel and collecting data, RTI was responsible for designing and monitoring quality control procedures for data collection activities. All study protocols followed a similar Internal Review Board (IRB) approval process conducted by the hospital and clinic IRBs, as well as the IRB of both RTI and NIH.

Methodology and Results

This section provides the approach and methodology used to implement each of the NIH-DC Initiative studies, and, when applicable, the findings that resulted.

Phase I Studies

Phase I was funded for a 5-year period in 1992 and included the following grantees: Children's National Medical Center (CNMC), the D.C. Commission of Public Health (CPH), DC General Hospital, Georgetown University (GU), Howard University (HU), and the University of the District of Columbia. The Greater Southeast and Providence Hospitals (affiliated with Georgetown University), the George Washington University (affiliated with CNMC), and the DC Office on Latino Affairs, and the Department of Corrections (in partnership with CPH) were also in the program. RTI was selected as the DCC for the program in 1993. Studies implemented in Phase I included:

1. Pride in Parenting (PIP): Parenting Education Impacts on Health Care Utilization
2. Adolescent Pregnancy Prevention (APP): A Program of Research
3. Barriers, Motivators, and Facilitators (BMF) to Prenatal Care Utilization in Washington, DC: A Program of Research (The Barriers Protocol)
4. The Prevention of Childhood Injuries (The Injuries Protocol)
5. The Prevention of Fetal Alcohol Effects (FAE) Study in the District of Columbia

Phase II Studies

The second 5-year phase of the program was funded starting on May 1, 1998 with four grantees: The Children's National Medical Center, Georgetown University Medical Center, Howard University, and George Washington University Medical Center. An extension of 1 additional year was granted by NICHD until May 14, 2004. In this phase, the results of the Phase I studies were combined with other information to develop and test strategies to lower risks for adverse pregnancy outcomes. Phase II studies included:

1. Adolescent Pregnancy Prevention: Building Futures for Youth (BFY-II)
2. The Assessment of Alcohol Use in Urban, Minority Women: A Field Trial of a Self-Administered, Computerized Alcohol Screening Tool (FAE-II)
3. Interventions for Risk Factors in Pregnant Women in Washington, DC: An Integrated Approach (Project DC-HOPE: Healthy Outcomes of Pregnancy Education)

Phase III Studies

The third 5-year phase of the NIH-DC Initiative was funded starting on May 15, 2004 with four grantees: The Children's National Medical Center, Georgetown University Medical Center, Howard University Hospital, and George Washington University Medical Center. The grantee sites collaborated on several protocols addressing issues related to maternal and child health in minority populations. A funding extension of 1 year was granted in order to achieve the required sample size for several studies. The following studies were implemented in Phase III:

1. Building Healthy Teen Relationships and Reproductive Practices to Increase Interpregnancy Intervals (GirlTalk)
2. Safety and Efficacy of a Randomized Controlled Behavioral and Nicotine Replacement Therapy (NRT) Intervention Trial in Promoting Cigarette Smoke Reduction and Cessation Among Pregnant African-American Women.
3. Adolescent Pregnancy Prevention: A Program of Research: Building Futures for Youth (BFY-III)